

REMARKS

Claims 1-19 and 34-45 are pending in the application. Claims 1-19 and 34-45 are rejected. Claims 1, 15, 17, 19, and 34, are amended herein. Claim 46 is new.

Formal Request for an Interview

The Applicant's agent respectfully asks the Examiner to reconsider his rejection of the claims. As discussed below, all of the claims are in condition for allowance. If the Examiner's reply to this communication is anything other than allowance of all pending claims, then I formally request an interview with the Examiner. I encourage the Examiner to call me, the undersigned representative for the Applicant, so that we can talk about this matter so as to resolve any outstanding issues quickly and efficiently over the phone.

Rejection of Claims 1-13, 15-18, 34-42, 44 and 45 Under 35 U.S.C. § 103(a) Over Cannon (U.S. Pat. No. 6,842,447) in view of Oran (US Pat. No. 6,275,574)

Claim 1.

Claim 1 recites a gateway including an IP port for coupling to an IP network device, one or more handset ports for coupling to non-IP digital PBX telephone handsets, and a protocol translator circuit that translates non-IP digital PBX telephone call control signals from the handset ports directly into IP telephone call control signals delivered to the IP port and translates IP telephone call control signals from the IP port directly into non-IP digital PBX call control signals delivered to the handset ports, and automatically determine the operating characteristics of handsets coupled to each handset port.

For example, FIG. 1A shows a remote handset gateway 11 that includes handset ports coupled to traditional (non-IP) digital handsets 10 and an IP port for coupling to an IP call controller 12. A block diagram of an internal structure is also shown in FIG. 2 showing handset ports 31 and an IP port 39. Notably, the block diagram shown in FIG. 2 illustrates an all-digital architecture. That is, IP call control signals are converted directly to non-IP digital PBX call control signals. Similarly, non-IP digital PBX call control signals are converted directly to IP call control signals. Page 9, lines 15 to 19

describe automatic determination of the operating characteristics of handsets coupled to each handset port.

The direct conversion between digital call control signal protocols may reduce problems inherent in digital-to-analog and subsequent analog-to-digital conversions. Automatic determination of the operating characteristics of the handsets may make set-up of the system easier and less technically demanding.

In contrast, Cannon does not disclose a remote handset gateway that includes both handset ports and an IP port. Since there is no gateway that connects to both remote handsets and an IP port, Cannon also does not disclose a protocol translator circuit for translating call control signals directly to and from non-IP digital PBX handsets and IP.

Cannon's handsets 31 are connected to a PBX 33. The PBX 33 is connected to an enterprise gateway 35. Cannon states that the structure and operation of the enterprise gateway 35 is similar to that of the PSTN/IP gateways 29. Cannon's PSTN/IP gateways 29, in-turn, receive PSTN signals through a switch 27 and convert them to IP signals for delivery to the IP network 13. Therefore, Cannon's enterprise gateway 35 must connect to IP signals on the network side and PSTN signals to the PBX.

Therefore, Cannon's PBX communicates with the enterprise gateway 35 via PSTN signals. PSTN signals are analog signals. Therefore, Cannon's system taken as a whole translates an incoming (digital) IP call control signal to an (analog) PSTN signal in one housing, and transmits the analog signal to a second housing where the analog signal is converted to a (digital) non-IP PBX telephone call control signal. Cannon does not directly convert from IP to digital PBX and from digital PBX to IP in an all-digital circuit using an all-digital signal path.

Moreover, even if Cannon did disclose a remote handset gateway that includes both handset ports and an IP port, Cannon does not disclose automatically determining the operating characteristics of handsets coupled to the handset ports.

Oran does not disclose a telephony interface that interfaces with non-IP digital PBX telephone handsets. In particular, at column 3, lines 31-33, Oran discloses that telephones 14 are coupled either directly or through a PSTN 16, PBX 30, etc. telephony

interface 36. Oran does not disclose or recognize that the telephone handsets may be non-IP digital PBX handsets.

Moreover, even if Oran did disclose a telephony interface that interfaces with non-IP digital PBX telephone handsets, Oran does not disclose automatically determining the operating characteristics of handsets coupled to the handset ports.

Combining Cannon and Oran, one does not find disclosed both an IP port and handset ports that interface with non-IP digital PBX telephone handsets. Similarly, combining Cannon and Oran, one does not find disclosed a gateway that automatically determines the operating characteristics of handsets coupled to the handset ports. Therefore, Cannon and Oran, alone or in combination, fail to disclose or reasonably suggest all the limitations of claim 1, and claim 1 is allowable over Cannon and Oran.

Claims 2-13.

Claims 2-13 are allowable by virtue of their dependence from claim 1.

Claim 15.

Claim 15 is amended. Claim 15 recites a gateway coupled both to non-IP digital PBX telephone handsets and to an IP network with an all-digital protocol translator circuit configured to translate the respective call control signals, and a remote IP call controller, the all-digital protocol translator circuit configured to send a set of signals to each non-IP digital PBX telephone handset designed to produce a different response from each of a plurality of different proprietary handsets and process the response or responses that are received to identify the type of each non-IP digital PBX telephone handset.

For example, FIG 1A shows a gateway 11 coupled to a remote IP call controller 12. FIG. 2 shows an all-digital protocol translator architecture

In contrast, by reasoning described above with respect to claim 1, Cannon and Oran, alone or in combination, do not disclose or reasonably suggest a gateway that is coupled to both non-IP digital PBX telephone handsets and to an IP network. Moreover, by reasoning given above in conjunction with claim 1, Cannon and Oran, alone or in combination, do not disclose or reasonably suggest an all-digital protocol translator circuit configured to send a set of signals to each non-IP digital PBX telephone handset designed to produce a different response from each of a plurality of

different proprietary handsets and process the response or responses that are received to identify the type of each non-IP digital PBX telephone handset.

Accordingly, Cannon and Oran, alone or in combination, fail to disclose or reasonably suggest all the limitations of claim 15, and claim 15 is allowable over Cannon and Oran.

Claim 16.

Claim 16 is allowable by virtue of its dependence from claim 15.

Claim 17.

Claim 17 is amended. Claim 17 recites a system including a proprietary IP telephone call controller that uses proprietary IP (digital signal) call control protocols, a gateway coupled to the global IP network at a location remote from the call controller and operable to directly translate non-IP digital call control signals received from a handset into IP call control signals according to proprietary IP call control protocols of the call controller and vice versa, the gateway having one or more protocol translating circuits that send a set of signals to each non-IP digital PBX telephone handset designed to produce a different response from each of a plurality of different proprietary handsets and process the response or responses that are received to identify the type of each non-IP digital PBX telephone handset.

As explained above in conjunction with claim 1, Cannon and Oran, alone or in combination, do not disclose or reasonably suggest directly translating IP call control signals to digital PBX call control signals nor directly translating digital PBX call control signals to IP call control signals. Moreover, Cannon and Oran, alone or in combination fail to disclose or reasonably suggest one or more protocol translating circuits that send a set of signals to each non-IP digital PBX telephone handset designed to produce a different response from each of a plurality of different proprietary handsets and process the response or responses that are received to identify the type of each non-IP digital PBX telephone handset.

Therefore, Cannon and Oran, alone or in combination, fail to disclose or reasonably suggest all the limitations of claim 17, and claim 17 is allowable over Cannon and Oran.

Claim 18.

Claim 18 is allowable by virtue of its dependence from claim 17.

Claim 34.

Claim 34 is amended. Claim 34 is allowable for reasons similar to those given for claim 1. Specifically, Cannon and Oran, alone or in combination, fail to disclose or reasonably suggest translating non-IP digital PBX telephone call control signals directly to and directly from IP telephone call control signals. Moreover, Cannon and Oran, alone or in combination, fail to disclose or reasonably suggest sending to a handset port a set of signals designed to produce a different response from different non-IP digital handset and receiving a response from the handset port a response indicative of the type of non-IP digital handset coupled to the handset port.

Therefore, Cannon and Oran, alone or in combination, fail to disclose or reasonably suggest all the limitations of claim 34, and claim 34 is allowable over Cannon and Oran.

Claims 35-42.

Claims 35-42 are allowable by virtue of their dependence from claim 34.

Claims 44-45.

Claims 44-45 are allowable by virtue of their dependence from claim 1.

Rejection of Claims 14, 19, and 43 Under 35 U.S.C. § 103(a) Over Cannon and Oran and In View of Bailis (WO 00/11818)

Claims 14 and 43 are allowable by virtue of their respective dependence from claims 1 and 34 and for at least the reasons given for claims 1 and 34.

Claim 19.

Claim 19 is amended. Claim 19 recites a gateway card having one or more protocol translating circuits that send a set of signals to each non-IP digital PBX telephone handset designed to produce a different response from each of a plurality of different proprietary handsets and process the response or responses that are received to identify the type of each non-IP digital PBX telephone handset.

Cannon, Oran, and Bailis, alone or in combination, fail to disclose a gateway card having one or more protocol translating circuits that send a set of signals to each non-IP

digital PBX telephone handset designed to produce a different response from each of a plurality of different proprietary handsets and process the response or responses that are received to identify the type of each non-IP digital PBX telephone handset.

Accordingly, Cannon, Oran, and Bailis, alone or in combination, fail to disclose or reasonably suggest all the limitations of claim 19, and claim 19 is allowable over Cannon, Oran, and Bailis.

The Commissioner is hereby authorized to charge any deficiency of fees submitted herewith, or credit any overpayment, to Deposit Account No. 07-1897.

If the Examiner believes that a telephone interview would be helpful, he is respectfully requested to contact the Applicant's agent at (425) 455-5575.

Dated this 11th day of February, 2009.

Respectfully submitted,

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